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Thoracoscopic repair of diaphragmatic hernia in neonates in Mofid Children's Hospital.

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Purpose: laparoscopic procedures are increasing by pediatric surgeons, and this modality has been used in many major surgeries. For this purpose we began repairs of congenital diaphragmatic hernias by thoracoscop in our center. Aiming to advance our skill for safe doing thoracoscopic CDH-repair in neonates.

Methods: From 2012 to 2014, thoracoscopy was carreid out in 7 stable neonates with congenital diaphragmatic hernia (CDH). Study variables including, age of neonate, the presence of a prenatal diagnosis, sex, gestational age at delivery, birth weight, side of the defect, the presence of other anomalies, duration of operation and outcome were reviewed.

Results: thoracoscopy was carreid out in 7 neonate, 6 diaphragmatic defects were repaired

Successfully; one case 10 minute after starting converted to open surgery followed hypercapnia. There were 5 males and 2 females with a mean age of 4 days (range, 2 days–6 days).

All were Left-sided CDH .The mean operative time was 75 min (range 60-120 min) in complete repair with thoracoscope. There was no blood loss or other complication during surgery. The mean postoperative hospital stay was 14 days (range 4–35 days). There was no case of mortality. There was one single case of recurrence 7 days after repair. There was no abdominal compartment syndrome after surgery. All patients extubated one day after repair. Mean fallow up was 11 month (6-36 month)

Conclusion: CDH can be safely repaired in stable neonate by thoracoscopy and is the best option for them.

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NICU operation for Congenital Diaphragmatic Hernia (CDH)

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Congenital diaphragmatic hernia remains a clinical challenge for both neonatologists and pediatric surgeons. Advancements in mechanical ventilation strategies and neonatal intensive care have improved survival and transformed treatment of congenital diaphragmatic hernia from emergent surgery to early stabilization of the newborn followed by delayed repair of the diaphragmatic defect.

This anomaly is associated with a variable degree of pulmonary hypoplasia (PH) and persistent pulmonary hypertension (PPH). Despite remarkable advances in neonatal resuscitation and intensive care and the new postnatal treatment strategies, many newborns with CDH continue to have high rates of mortality and morbidity as the result of severe respiratory failure secondary to PH and PPH. The pathogenesis of CDH and associated PH and PPH is poorly understood.

The treatment focus has also changed from emergency surgery at birth or presentation to surgical closure of defect after stabilization of the patient. Despite all these advances in neonatal care and surgical management, congenital diaphragmatic hernia (CDH) remains a condition with a significantly high mortality rate.

After stability in NICU transportation to operating room is a risk for these patients, for this reason, we started a new policy in treatment in these patients, as we do /did our operations in two groups of patients with this anomaly.

I n one group (5cases)of them we did operation on NICU bed side without transportation to operating room and in other group(5cases) we transported cases to operating room we found a remarkable difference in outcome in these two groups that we will discuss in our presentation.

دکتر هدایت الله نحوی

A Rare Case of Central Congenital Diaphragmatic Hernia

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Background: Congenital diaphragmatic hernia (CDH) refers to a group of congenital defects in the structural integrity of the diaphragm which are often associated with lethal pulmonary hypoplasia and pulmonary hypertension which usually found at birth. .incidence of CDH is between 1 in 2000 to 5000 births with a mortality rate of 30 to 60%. Most cases of CDH are sporadic. There are several different types of CDH, most of CDH cases are posterolateral hernias, and often on the left side. Central CDH occurs in the midline of the septum transversum and accounts for 1 to 2% of cases of CDH. The pathologic consequences of CDH result from the abdominal contents entering the thoracic cavity. Hypoplasia of the lung due to decreased thoracic volume results in compromised pulmonary capacity often resulting in neonatal death. The late presentation of the (CDH) with subtle symptoms of recurrent colicky pain abdomen or respiratory distress are sometime misleading and the first requisite for the diagnosis of a (CDH) in late presenters is a high index of suspicion. The aim of this case report is to provide information on the presentation, diagnosis and outcome of a rare case of CDH.

Methods: we are reported a case with atypical and late-presenting CDH and review the articles

Results: A 35 days old infant, who referred to our hospital with a history of respiratory problems and pneumonias since neonatal period. The diagnosis of left CDH was based on clinical investigation and confirmed by plain x-ray films, ultrasonograghy and computed tomography scans. And the diagnosis of central type was done at operation.

Conclusions: The lack of typical clinical presentation in cases of late presenting CDH leads to delayed diagnosis. Central Congenital diaphragmatic hernias should be included in the differential diagnosis of apparent lower lobe pneumonias in a neonate

دکتر محمد وحید حسینی، دکتر بابک ثابت

Comparison of early neonatal valve ablation with vesicostomy in patient with posterior urethral valve

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A vesicostomy is believed to have a pop off effect in boys with posterior urethral valves in early neonatal period because of neck and detrssure hypertrophy which doesn't corrected with primary valve ablation as compared with vesicostomy. We compared the outcomes of boys managed by initial vesicostomy with those undergoing primary fulguration. Our aim is to evaluate the effect of vesicostomy on this viscous cycle on final outcome.

Materials and methods: The outcomes of 56boys (25 vesicostomy, 31 primary valve fulguration) over 2 year .Outcome parameters identified were ultrasound findings, glomerular filtration rate (GFR) and 1-year creatinine. Results are presented with 95% confidence intervals.

Results: Ultrasound examinations were normal in 8/19 (42.4%) of the vesicostomy group and 11/25 (44%) of the fulguration group. Graded ultrasound results were not significantly different ($p = 0.24$). The vesicostomy group had on average higher GFR (94.26 vs 86.79) and lower 1-year creatinine (50.58 vs 53.46) values. After accounting for age differences between groups, there was no significant difference in the GFR and 1-year creatinine values ($p = 0.1$ and $p = 0.85$, respectively

Conclusions: There was a tendency for the major outcomes to be more favourable in the vesicostomy group. Although trends were non-significant, confidence intervals were wide and potential differences of clinical importance could not be discounted

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Post discharge follow up of children with congenital diaphragmatic hernia in Dr. Sheikh's Hospital at Mashhad from 2006 to November 2013

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Background: Congenital diaphragmatic hernia is a congenital anomaly, Due to the lack of development of Pleuroperitoneal curtain between the abdomen and chest. Failure to thrive is with 69% of these patients due to the increased needing for calories because of chronic lung diseases and poor feeding because of neurological disorders and gastro esophageal reflux. The aim of this study was to evaluate the growth status of children after surgery and set up a proper diet to reduce possible complications and optimum growth after surgery.

Methods: In this observational study, the information of 146 children with congenital diaphragmatic hernia after surgery in sheikh hospital at Mashhad from 1385 to November 1392 was out of the HIS system. Demographic, anthropometric, postoperative complication and other data were collected.

Results: Among the 61 participants, 20 patients (32.7%) died during the interval of 6 months after surgery, but 41 patients (67.2%) survived until the end of the study. The mean age of participants was 24.21 ± 30.26 months that 39% were female and 61% were male. Mean birth weight and birth length and birth head circumference was respectively, 0.55 ± 3.15 kg and 2.68 ± 49.70cm and 1.88 ± 34.81 cm. Gastrointestinal complications during the study were about 4.9% diarrhea, 24.4%constipation,4.9%vomiting, 12.2%cough, and 2.4% abdominal pain and 51.2% had no complication. Based on Z-Score of current weight for height, nutritional status was about 7.3% severe malnutrition, 4.8% moderate malnutrition, 24.3% mild malnutrition, 9.7% overweight and 2.4% obese and 51.2% were normal.

Conclusion: Most of these children after surgery had a normal growth and fewer of them had a weak growth in the early years of their life that must set up a proper diet to supply their extra needing for calories.

Classic Bladder Exstrophy in the Newborn, Evaluation and Management at Birth

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At birth although the bladder mucosa is usually smooth and intact, but sensitive and easily denuded. In the delivery room the umblical cord should be tied with 2-0 silk close to the abdominal wall. The bladder can then be covered with saran wrap to prevent sticking of the bladder mucosa to clothing or diaper.

Although it is through that parents need to be educated as fully as possible about the exstrophy condition. This is especially true regarding the sex of rearing males with bladder exstrophy.

Cardiopulmonary and general physical assessment measures can be carried out in the first few hours of life.

Selection of Patients for Immediate Closure, Successful treatment of exstrophy with functional closure demands that, the potential for success in each child be carefully considered at birth.The siize and functional capacity of the detrosure muscle are important considerations for eventual success of functional closure.

The exstrophied bladder that is estimated at the time of birth to have a capacity of 5 ml or more and demonstrates elasticity and contractility can be expected to develop useful size and capacity after successful bladder, posterior urethral and abdominal wall closure with early epispadias repair.

Small Exstrophy Bladder for Closure

A small , fibrotic bladder patch that is stretched between the edges of the small triangular fascial defect without elasticity or contractility cannot be selected for the usual closure procedure .Decisions regarding the siutibility of bladder closure or the need for waiting should made only by surgeons with a great deal of experience in the extrophy condition.

Some conditions preclude primary closure, including penoscrotal duplication, ectopic bowel within the exstrophied bladder (relative contraindications), Hypoplastic bladder, and significant bilateral hydronephrosis. Another alternatives involves urinary diver

Waiting for the bladder template to grow for 6-12 months in the child with a small bladder is not risky as submitting a small bladder template to closure in an inappropriate setting, resulting dehisience and allowing the fate of bladder to be sealed at that point.

If the bladder dose, not grow to sufficient size after 6-12 monthes, other options include, excision of the bladder and a non-refluxing colon conduit, ureterosigmoidostomy. Another alternative involves urinary diversion with a colon conduit and placing the small bladder inside to be used later for the posterior urethra in an Arap- type procedure. Lastly if the bladder is small at the presentation is for late primary closure. Bladder augmentation, ureteral reimplantation and an outlet procedure, in addition to a continent urinary stoma, can be considered.

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Thoracoscopic Congenital Diaphragmatic Hernia repair in neonate: The First Experience of Iranian Group

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Background: Congenital diaphragmatic hernia (CDH) consists of a posterolateral defect of the diaphragm, generally located on the left side (85-90%) that allows passage of the abdominal viscera into the thorax. The first successful repair of CDH returns to 1905 by Heidenhain. Until 1995, the standard method for treatment of CDH was performed by open surgery through the abdomen or thoracic cavity. Minimally invasive approach via thoracoscopy or laparoscopy is applicable for treatment of CDH from 1995. Now, thoracoscopic repair of CDH (T'Scopy CDH) was performed in many centers. In this paper, we present the first experience of T'Scopy CDH repair from Iran.

Patients and Methods: from 2011 to January 2015, 74 patients with CDH were admitted to Pediatric Surgery Department of Dr. Sheikh (Sarvar) Pediatric Hospital. 21 patients (28%) met selection criteria and underwent T'Scopy CDH repair. The median age at the time of repair was 5 days (2-days-old to 4-years-old patients). Including criteria was weight over 2 kg and stable hemodynamic and arterial blood gas. 14 cases were intubated at the time of referring to operating room. In all cases, the defect was in the left side except in two. In 8 cases, we used thoracic wall as a part of repair. Also, mesh support was utilized in 8 cases even in those that we were able to perform primary repair of diaphragm for reinforcing the repair (5 cases). Of these 8 cases, in 3 patients, whole repair was accomplished by mesh due to large defect.

Results: The mean time of operation was 80 minutes (40-230 minutes). Intraoperative mortality was zero. In hospital, mortality occurred in two cases due to septicemia in one case, and hypercapnia, inability to stabilize the case and finally respiratory and cardiac failure in other one. Conversion to open surgery was required in 6 cases. In one case, simultaneous presence of sequestration was found. In-hospital, recurrence occurs in 2 cases that were managed by open surgery. Late recurrence was observed in 2 cases. The mean age of follow up was 14.6 months (3-36 months).

Conclusion: It seems that case selection and liberal use of thoracic wall as a part of repair and prosthetic use of mesh as a support of primary repair may cause better results and decreased chance of early and late recurrence.

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One stage gastric pull-up for long gap type A esophageal atresia

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Background: Long gap esophageal atresia may preclude a single-stage esophagoesophagostomy. Traditional surgical management of infants with type A esophageal atresia includes a diversion procedure composed of esophagostomy and gastrostomy, followed by esophageal substitution after 6 to 12 months, but sequential stretching, gastric pull-up, and substitution with segments fashioned from stomach, small intestine, and colon all have been used to restore esophageal continuity. It is believed that the stomach is a superior conduit because of its innate acid resistance, its ability to retain a tubular shape without dilatation, and its ability to bridge long gaps because of an excellent and reliable blood supply.
Methods: In our experience, five patients underwent one stage gastric pull up for long gap type A esophageal atresia. Four infants had a totally uncomplicated course and have not required further admissions and one infant expired after about one month because of heart failure.

Conclusion: In view of the acceptable morbidity, mortality, and gastric functional outcome of neonatal gastric pull-up in our series, we recommend this procedure for neonates in whom primary esophageal repair is impossible because of long gap atresia.

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Anal shift in female neonate with perineal fistula

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Background/purpose: When a low anomaly (perineal fistula) is diagnosed, the fistulous track to the perineum is always located anterior to the sphincter mechanism. In text books recommended to limited posterior sagittal anorectoplasty in the newborn period or older infant. However a much simpler surgical correction with more aesthetically and functionally results is anal shift. This new technique described by Ashok Shah and we used it in our patients.

Material & Methods: from 2013 until 2014, 7 female neonates with anterior ectopic anus had undergone anus correction by anal shift in Mofid children's Hospital. All patients had mild to sever stenosis. Colostomy did not perform in any of them.

Results: Diet was begun for them one day after surgery. All patients discharged 2 days after surgery. Partially dehiscence was seen In 2 cases that resolved with conservative management. They had been followed for 12-18 months and underwent routine anal dilation by bougie and had no stenosis. All of them had constipation that responded to laxative.

Conclusion: Anal shift is a simple procedure with a short duration of surgery in litotomy position. It does not need to extra dissection so muscle complex and anal function remains relatively intact with satisfactory distance between vulve and anus. Anal shift appears to be choice in girls with anterior ectopic anus.

Thoracoscopic Esophageal Atresia repair :Report of 40 cases

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Background: Minimally invasive surgery (MIS) is becoming more common in pediatric surgery. Neonatal MIS is a difficult part of this field and need much more experience. Esophageal atresia is one of the diseases in neonatal surgery that today we are able to correct the defect by MIS. The minimally invasive technique for surgical correction of esophageal atresia (EA) was first described by Lobe et al. From that time, it has been gaining acceptance among many pediatric endoscopic surgeons. The first successful thoracoscopic repair of EA was performed in 2000, but it was not popularized in the world until 2005. In this article we present our experience in thoracoscopic repair of EA in Mashhad University of Medical Sciences that was started from 2010.

Method and material: From 2010-2015, 40 thoracoscopic attempts were performed to correct the EA-TEF in neonates in Pediatric Surgery Department of Dr. Sheikh Pediatric Hospital of Mashhad University of Medical Sciences. 23 cases were operated completely by thoracoscopic approach. From 2010 to 2012, 15 thoracoscopic attempts were performed. Of this number, conversion happened in 10 cases (66.6%). In 2013, the number of conversion dramatically dropped in 2 cases (14.2%) from 14 thoracoscopic attempts which declined up to 79% than the first 2 years. In 2014, this rate was increased again and reached to 5 cases (45.4%) from 11 thoracoscopic attempts. This increase was due to starting learning curve for two other pediatric surgeons who joined to our MIS team. Totally, conversion was required in 17 cases (42.5%) during these years. In all cases, procedure was performed through the right thoracic cavity with 4 ports. The length of first successful thoracoscopic repair was 5 hours, but with increasing experience, mean time of operation has been decreased up to 178 minutes in the last two years.

Results: Full thoracoscopic EA repair was performed in 57% of cases.

Conclusion: it seems that EA-TEF repair needs long time learning curve. The success rate has been improved with increased experience.

دکتر محمد وحید حسینی، دکتر بابک ثابت

Uretropelvic junction obstruction in neonatal period (time of operation and length of stenting)

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Internal stenting and the safe interval for operation in neonatal hydronephrosis with Uretropelvic obstruction (UPJO) are integral part of treatment planning. Inherent stent related problems warrant a minimum possible duration of stenting without compromising the results and the interval time from birth upto date not compromising the existing renal function. We performed a prospective randomized trial to evaluate the optimum duration of stenting and interval time in neonatal UPJO.

Materials and Methods: A total of 57 meaan age 7.5(range 5-10dys) consecutive patients underwent open dismembered pyeloplasty with a primary ureteropelvic junction obstruction were randomized to undergo 11Fr /4.5 jstent internal stent placement/external stents for >8 (group 1) and 2 (group 2) weeks with interval time of operation defined by increased severity of hydronephrosis and renal impairment from birth time. Including criteria were 1-absent renal failure and fetal pelvic dimension >20mm. All patients underwent renal ultrasonography and diuretic scanning at 3, 6, 9 and 12 months yearly, and thereafter with diuretic renography.

Results: In each group 26 patients were available for evaluation. The 2 groups were comparable in terms of age, sex, symptoms and ipsilateral glomerular filtration rate. Mean interval time to operation was 2.3 (range 1 to 3) and 2.3 months (range 1.2 to 3.5) in groups 1 and 2, respectively. At the end of mean 8.4 (range 8-10weeeks) 24 group 1 (92.3%) and mean 3.5 (range 2-6weeks) 23 group 2 (90.3%) patients had an improved drainage pattern. This difference was not significant. Stent related symptoms were present in a good proportion of patients in groups 1 and 2 but there was a significant difference in the incidence of urinary tract infections (11.5% versus 38.1%, p = 0.04). Of the group 2 patients 64% preferred 2 weeks of stenting.

Conclusions: Two weeks seems to be a sufficient duration to allow functional restoration across the ureteropelvic junction and the interval time to operation after the first 2 months of life seems feasible and not compromising renal function.

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Soft Palatine Mass with Diagnosis of Mature Teratoma

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Background: Teratoma is a special type of Mixed Tumor that contains recognizable mature or immature cells or tissues representative of more than one germ cell layer and sometimes all three. They have a reported incidence of 1 in 4000 live births.

Method: 1 day – old male baby was referred for respiratory distress secondary to the presence of an oropharyngeal mass. The mass was attached to the soft palatal wall. Under general anesthesia lesion was excited.

Result: on the gross pathological examination, the excisional material was a polypoid lesion of 3*2*1.5 cm size whose surface was covered with skin.

Conclusion: Teratomas of the head and neck are rare congenital lesions. Nasopharygeal teratomas are even more rare. The most common presentings syptom of nasopharyngeal teratomas is respiratory distress. Patients with teratomas are more likely to require intensive airway management prior to surgical excision of the lesion.

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Pyloric Stenosis Complicating Esophageal Atresia

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Background: Post-surgical complications of esophageal atresia (EA) include anastomotic leak, anastomotic stricture, gastroesophageal reflux, tracheomalacia, and recurrent tracheoesophageal fistula (TEF). However, hypertrophic pyloric stenosis (HPS) is complicating EA which seems to be rare. The aim of this report is to emphasize on HPS as a possible complicating post-operative course of EA, the diagnosis of this complicating disorder may be delayed.

Case Presentation: A 3000 gram male infant was born at 38 weeks gestation to a 21-yearold, gravid mother by cesarean section. He presented vomiting with profuse foamy discharge and salivation. Esophageal atresia was confirmed by looped orogastric tube in the upper pouch of esophagus in chest X-ray. He underwent surgical correction and was discharged with a good condition on 7th post operation day. Nevertheless three weeks later, he developed recurrent vomiting. The diagnosis of HPS was confirmed by ultrasonography and barium upper gastrointestinal (GI) series. Pyloromyotomy was done on him and He was discharged without any complication. At 3.5 months old, he developed regurgitation and chocking cyanosis. At this time esophageal stenosis was diagnosed by barium swallow. The stricture was treated by gastroduodenoscopy.

Conclusion: Infantile HPS should be considered in any case of persistent vomiting and feeding intolerance after surgery for esophageal atresia. A high index of suspicion is required for diagnosis to avoid complication arising from a delayed diagnosis.

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Congenital cystic lung disease in neonate: Single-center experience

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Background/purpose: Congenital bronchopulmonary malformations are rare but potentially life-threatening anomalies of infants and children. Congenital cystic lung disease include congenital pulmonary adenomatoid malformations, bronchopulmonary sequestrations,
bronchogenic cysts, and congenital lobar emphysema that result from disturbance in lung and airway embryogenesis. This review will focus on advancements and current practice in the diagnosis and management of congenital cystic lung disease in neonate in our center.

Material & Methods: in this retrospective study we collected all files related to congenital cystic lung disease from 1385 until 1392 that operated primary in our center. Referral patients with complication removed from our study. We provided lobectomy sheet and collected all information from files. In this abstract we reported only results of surgery in neonatal period.

Results: Between 1385 until 1392, 90 patients from birth to 14 years of age (63% boys and 37% girls) underwent evaluation and treatment for bronchopulmonary malformations. 14 patients underwent surgery in neonate. In neonates, only one case had history of prenatal diagnosis. All of them were symptomatic as respiratory distress.Pulmonary infection was seen in one case. In 9 cases right side was involved. Congenital heart disease was detected in 2 cases.6 neonate had cystic adenomatoid malformation (CCAM) ,one case, extralobar sequestration and 6cases congenital lobar emphysema and one case bronchogenic cysts.Ultrasound revealed cystic pulmonary lesion in 7 patients. Computed tomography was done for 11 neonates.

All of them underwent thoracotomy except one patient who underwent thoracoscpic resection. Most common resected lobe was right lower lobe. Only complication after surgery was massive air leak that required to second chest tube in one cases. All patients are alive in good condition.

Conclusion: Although in this review all neonate were symptomatic but in respect to long-term complications of infection and malignancy, there is trend to elective excision of congenital pulmonary lesions in infants with asymptomatic lesions.

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Laparoscopic Hypertrophic Pyloric Stenosis

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Abstract: Hypertrophic Pyloric Stenosis (HPS) is a gastric outlet obstruction which characterized by thickening of the circular muscle of the pylorus. The prevalence of this condition is reported to be approximately three per 1000 live births. Boys are affected four times more often than girls and between the ages of 6 to 8 weeks.

Patients and Methods: In this review, we study 62 patients with HPS who referred to Dr. Sheikh (Sarvar) Pediatric Hospital from 2011 to 2015. Of these patients, in 19 cases we were able to accomplish the procedure completely by laparoscopic approach except in one case with incomplete myotomy who underwent open surgery 2 days later. So, the success rate of laparoscopic HPS is approximately 94%. The ratio of male to female was 15 to 4. The length of surgery was 30 minutes. The first open port was inserted five mm above the umbilicus. Two three mm stab wounds were made in right upper quadrant (RUQ) and midline of supra-umbilical. Gas insufflation started with 8 mmHg pressure and flow rate of 5 L/min. First, olive was exposed and its surface cauterized. Then, Ramstedt's pyloromyotomy was performed by specific laparoscopic grasper.

Results: The results show no perforation, mortality, morbidity and severe bleeding. Moreover, cosmetic result was excellent.

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A Comparison of Results and Complications in Laparoscopic Versus Open Pyloromyotomy for Treatment of Hypertrophic Pyloric Stenosis in Bahrami Children's Hospital

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Background: Laparoscopic procedure for the treatment of infantile surgical conditions is a conflicting issue. Hypertrophic Pyloric Stenosis is a pediatric disorder that can be managed by laparoscopy. This is a study with respect to the new implementation of laparoscopy and comparing the methods and results with open surgery, in Iran.

Methods: Subjects referred to Bahrami Children's hospital with ultrasound-proven pyloric stenosis from 2011 through 2014 were enrolled in this study. Pre, intra and post-operative data for each patient was collected. Patients were followed for 3 months. The results were compared with those obtained from 26 patients who had undergone open surgery between 2009 and 2011.

Results: 49 patients underwent pyloromyotomy including 26 open and 23 laparoscopic surgeries. Mean time of operation in this group was 23.48 minutes comparing with 27.88 minutes in the open surgery group which was identically shorter in the first group. Also, nausea or vomiting in the 24 and 48 hours past laparoscopy were 5.1% and 0% vs, 30.8% and 42.3% in open group. There was only one case of gastric mucosal perforation during laparoscopic procedure. No significant difference was found neither in the onset of post operation feeding nor length of stay between two groups, despite reduced time in laparoscopic procedure .

Conclusion: We concluded that with an expert pediatric surgeon, laparoscopic procedure is suitable substitute for the traditional open surgery, for the treatment of the Hypertrophic Pyloric Stenosis

دکتر مریم قوامی عادل، دکتر نیکو نیک نفس، دکتر وفا صباغ

Upper Gastrointestinal perforation in neonates

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Upper gastrointestinal perforation is a rare but potentially fatal event. Premature neonates are more vulnerable to esophageal perforation than full-term neonates. The etiology is usually iatrogenic. Gastric tube insertion, endoscopy and attempted endotracheal tube intubation account for most of perforations. Symptoms depend on the site of perforation and may include respiratory distress, tachycardia,
tachypnea, drooling and coughing and acute abdomen sign and symptoms. According to the literature most of esophageal perforations can be managed nonoperatively but gastric and deudonal perforations need immediate surgery most of times. Here we explain 5 cases with upper gastrointestinal perforation their presentations, managements and outcomes.

Human Tail in a 7 day old Neonate

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Background: Human tail contains of tow type, true human tail and pseudo human tail. The true type is originated from the distal part of the remnant of the emberionic tail and contains of nerve, muscle, connective tissue and adipose tissue which are covered by skin tissue. Pseudotails represent a variety of lesions having in common a lumbosacral protrusion and a superficial resemblance to vestigial tails.

Spinal disraphism is the most common coexisting anomaly with the two types of human tail. On the other hand 50% of occult spinal dysraphisms are associated with some superficial signs. One of these signs is human tail.

Method: A 7 days neonate was reffered to our hospital because of a tail like appendage in the lumbosacral region. Neurologic examination was normal in this infant and ultrasonographic evaluation presented adipose and muscle under the skin of this appendage. We performed MRI for more assessment. We found occult spinal dysraphism in MRI evaluation with no nerve involvement.

Result: we excised the complete tail under general anesthesia and repaired the remaned skin primarily.

Conclusion: persince of any tail like vestigia in the lumbosacral region must alert the pediatric surgeon to the possibility of spinal dysraphism and make a plan before the operation for this coexisting anomaly.

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The use of Rehebien t-tube in proximal jejunal atresia for treatment of delayed intestinal transit time

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Background: Small bowel atersia is usually one of the most common cause of intestinal obstruction in neonate.the more proximal obstruction causes more postoperative intestinal transit disorder .with honor of Rehebien we had used his t -tube to evaluate the effect on transit time in proximal jejuna atresia .

Methods: we had enrolled 10 neonates with mean age 3.5 range (1-4) days during 2011- 2014 in this study. They underwent the classic operation of proximal to distal end to back jejujejunal anastomosis plus inventing a #14 t-tube in proximal dilated segment as ostoma and stenting the anastomosis. They reciecved antibiotic and TPN and were followed by Grade (G) 1-4 delayed intestinal transit scales and complications.

Results: Eight of 10 had survived and had mean G 3.5 range (2-5) weeks. One died of sepsis and one developed anastomotic leakage.

Conclusion: The rational of rehebien t –tube usage advocate that is a dependent drain that obviated the prolonged NG usage and improve the diameter of proximal segment sooner and prevent narrowing of small anastomosis.so data support the earlier improved motility.

دکتر سهیل بن رضوی، دکتر محمد گلشن

Primary T-tube jejunostomy is more efficacious than gastrostomy tube in neonates with pure EA (Esophasial Atresia)

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Background: EA is a congenital esophageal anomaly with incidence of 1/2500 --1/4500 births.Type A, EA, with no fistula is 6-8%of them.
For primary management of these neonates gastrostomy tube insertion is recommended.in this study we compared that with jejunostomy tube insertion and had good results.

Methods: Between 1387-1393, 8 neonates with pure EA, with simillar characterestics had chosen, divided to two groups:4 with gastrostomy tube and 4 with jejunostomy tube. For 2 patients in every group we have done colon interposition and the other two were managed by gastric tube interposition. these patients were compared and analysed for 1-duration of operations 2-fascility of operations 3-post op courses 4-post op stating of feeding 5-duration of hospitalizations 6-nursing and parents care

Results: Overall we had 4 colon and 4 stomatch interpositions, in groups with J-T we had 45-60 minutes shorter duration of operations ,much less adhesions, more fascility, better post op courses, lesser hospitalizations (7days),and more acceptance by nurses and parents.

Conclusion: For primary management and future planning of surgery of pure EA neonates, feeding jejunostomy (T-tube)is strongly recommended.

دکتر محمد وحید حسینی، دکتر بابک ثابت

Comparison of early neonatal vesicostomy with clean intermittent catheterization in patient with neurogenic bladder

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Aim Renal damage and renal failure are among the most severe complications of neurogenic bladder ,so it is mandatory to treat detrusor overactivity from birth onward, as upper urinary tract changes predominantly start in the first months of life. During a bladder contraction with inappropriate sphincter contraction the increased pressure will pop off into a refluxing kidney, or alternatively cause increasing hydronephrosis without vesicostomy .

Methods: We report the results of a prospective study on neonates (from 2009 -2013) with neurogenic bladder. Fourty six newborns mean (range) age 7.4 (2–16) days with hydronephrosis or evidence of retention a high risk group underwent full urological evaluation and was followed for a mean period of 16.2 months. They divided into group (G1) 16 underwent vesicostomy and the group (G2) 30 started CIC and antimuscarinic therapy shortly after birth

In (G1) hydronephrosis resolved or improved in 12 of 14 children, the incidence of UTI decreased to one, VUR resolved or improved in nine, and renal function improved or stabilized in six of seven patients. Complications occurred in three of 15 children, and included stomal stenosis and bladder calculi .

In (G2) the changes improved in 40 per cent of the children, 40 per cent remained stable and 20 per cent showed signs of deterioration .

Conclusion; Vesicostomy is a well-known management of the neuropathic bladder and our study showed the appropriately use of early vesicostomy in hostile bladder of myelodysplastic children

دکتر صلاح الدین دلشاد

Evaluation of Neonates with Ambigus Genitalia in Ali Asghar's Hospital

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Background: Ambigus Genitalia is a serious problem for parents in the first days of neonatal life and it must be solved as soon as possible.

This decision making must be done with co-opration between pediatric surgeons and pediatric endocrinologist.

Method: Patients evaluations were done by pediatric endocrinologists genetic specialists based on clinical examination, Laboratory Findings at the end a pediatric surgeon evaluated the patients by Endoscopy and sinography and gonadal Biopsy.

Result: our patients were divided to four groups**.** 139 Patients with Female pscudo hermapherodism (46 XX DSD), which clitoroplasty and Labiaplasty and Vagionoplasty was done (except one for delay diagnosis) for them

62 Patients were Male pscudohermapherodism (46 XY DSD), 5 Patients were mixed gonadal dysgenesis and 2 Patients were true hermapherodism

Conclusion: decision making about the perfect sexuality in Ambigus genitalia is a big problem and at first we must explain it for the parents with careful manner.

Omphalocel Associated with patent Omphalomesenteric Duct in a neonate

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Background: Association of omphalocele with patent omphalomesenteric duct POMD is a rare condition. A few authors explaied this anomaly and few cases are reported in the literature.

Method: A 8 hours neonate was refferred to our hospital due to omphalocele.

This neonate had meconiom passage from an opening though the sac of the ompalocele after admition in NICU. The color of the bowell under the sac was normal pink and the intraperitoneal space looked clear without meconiom laeak. We prepared the neonate for operation.

Result: At the time of operation we saw a patent omphalomesenteric duct POMD which was attached to the sac of omphalocele at one end and a T- shaped ileom at the other end .

Conclusion: POMD assiciated with omphalocele is a rare coexisting anomaly which the cardinal signs of it is meconiom passage from the sac of omphalocele.

Postoperative Complications in Patients with Intestinal Malrotation

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Background: infants with Intestinal mal rotation, addition to the risk midgut volvulus usually associated with others congenital anomalies such as complex congenital heart disease that have effective on the survival and post-operative complications so required timely , meticulous radiologic diagnosis and medical management before and after performing a Ladd procedure with or without small bowel resection .

The purpose of this study was to review the incidence of postoperative complications in patients with Intestinal mal rotationin recent five years in our two pediatric surgery wards and compare to our pervious study.

Methods: The medical records of all patients' Intestinal mal rotation that underwent a Ladd procedure between 2006 and 2011 in two children hospitals centers of TUMS were reviewed. Demographic Clinical symptoms and signs, diagnostic modalities, associated congenital anomalies, operative, postoperative complications, and mortality data were recorded.

Results: of sixty –three infants (46 boys and 17 girls) 83.1% underwent an emergency Ladd procedure and 15.9% after their medical stabilization or palliation of their other anomaly Range of Age at admission were 1day to2months

The median age of patients at the time of the operation was5.7days .the most common clinical symptoms was bilious vomiting in 88.9% of patients and median stay days of hospitalization was 6.4 days (ranged between3and15days).

Range of Age Of these patients for evaluation for complications was between 2.3 and 6.04 months after the operation.

Developed postoperative intestinal obstruction due to adhesion bands: lysis of adhesions was performed in 5.9%patient; 7,9% patient required another operation for a recurrent midgut volvulus after an incomplete initial Ladd procedure. 9% persistent GI symptoms the3/6 deaths, after the surgery, occurred due to the underlying cardiac anomaly or sepsis

Conclusions: a timely diagnosis and performing ladd procedure and medical management for patients with malrotation had an acceptably low morbidity in recent years

Choledochal cyst presenting as huge abdominal mass in neonate

(Case report and reviewing management)

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Background: Choledochal cysts have been associated with complications such as cholangitis, pancreatitis, and malignancy of the biliary tract. Recently, the incidence of choledochal cyst in neonate and young infant is increasing due to advances in diagnostic imaging. The aim of this study is to report a unusually large cystic abdominal mass like a mesentric cyst and to investigate the rationale of excision of choledochal cyst during the neonatal period .

Case: A two days old baby boy who was born with prenatal imaging of large intra-abdominal cystic mass in favor of mesentric cyst.patients P/E and labaratory workup were normal except a huge cystic lesion occuping nearly whole abdominal cavity in imaging studies.he underwent exploratory laparatomy while a huge adhesive choledocal cyst found .it was resected and roux-eny anastomosis with jejunum performed.he had uneventfull postoperative period and discharged with follow-up.

Discussion: The clinical outcome and correlation between age at surgery and the degree of liver fibrosis were reviewed in many centers retrospectively. The overall outcome and the outcome of patients who were managed surgically during the neonatal period were compared. The results support the rationale that excision of choledochal cyst can be performed safely without increasing morbidity in neonates.

Biliary Atresia Assiciated with Polysplenia Sundrome, situs Inversus Abdominus, Reverse Rotation of Intestine and Dexrerocardia in 28 days new born

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Background: Biliary atresia is a rare disease in which the inflamatory progressive process of bile ducts endes to complete obstruction of bile ducts and liver cirhosis. Biliary atresia is divided to tow types, syndromic or neonatal type (10%_30%) which is associated with other congenital anomalies and non syndromic type (70%_90%) which is not associated with other congenital anomalies. We report a 28 days newborn with biliary atresia associated with polysplenia syndrome, situs inversus abdominus and some other congenital anomalies.

Methods: A newborn was referred to us due to conjugated hyper bilirobinemia. Gulblader was not seen in ultrasonigraphic evaluation and the liver was located at the left and polysplenia was detected at the right side of the abdomen. .On preoperatively, echocardiography and chest x-ray intrathoracic heterotaxy was shown and the heart was located at the right side of thorasic cavity. On HIDA scan no excretion of the radiopharmaceutical tracer was noted. On abdominal radiography the stomach was in the right side of abdominal cavity.

Results: The patient was operated through an extended kokher incision. The gold standard operation for biliary atresia is Roux en Y hepaticojejunostomy through transverse colon mesenteric window. The duodenum was entirely intra-peritoneal and transverse colon was retroperitoneal in position. Therefore Roux-en Y hepatico-jejunostomy was performed without going through the transverse colon window. The post operation follow up was acceptable and feeding was started at the fifth day after operation and the patient was discharged from hospital at the 8th day of operation. The fecal material was colored and the level of bilirobin was tapered.

Conclusion: To conclude, biliary atresia polysplenia syndrome is a rare occurrence. Forthermore it can be with other association anomalies like: situs inversus abdominus, malrotation or non-rotation of the bowel and dexterocardia. The surgeon must be careful of the surgical implications that may occur in case of associated malrotation/reverse rotation and non-rotation, and mirrored alimentary tract anatomy .

Neonatal trauma survey in Imam Hossein center of Esfahan

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Background: Trauma is the leading cause of death in children aged 1-14 years, but there is some limited study for neonatal trauma in Iran. In this assay we evaluated this type of trauma in our center .

Methods: In a case – series study, files of neonates who admitted in our hospital for trauma were analyzed. In each patient, data such as sex, mechanism of trauma, length of hospitalization, outcome, clinical findings, management and diagnostic assays were evaluated. Then based on review of articles a guideline for approach to neonatal trauma was proposed .

Results: In this study, five neonates were evaluated. All patients were male. The range of age of patients was 1-25 days. The mechanism of trauma was difficult labor in three patients. One patient had falling and another one had car accident. In all patients cranial CT scan were done but no one had CXR, abdominal sonography or skull x-ray. All patients were discharged alive. SAH was the most common injury in patients. Non operative management was done in all patients. Length of hospitalization was 1-5 days.

Conclusions: Neonatal trauma should be revisited in our country. Our guideline can be useful for this purpose.

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Clinical outcome and bowel function after surgical treatment in Hirschsprung's Disease

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Background: Bowel function has been reported to be adversely affected following surgery in cases of Hirschsprung. Given the paucity of literature in this respect, we intended to investigate both the clinical outcome and bowel function status following surgery in cases of Hirschprung's disease.

Methods: This retrospective study included 161 cases, who underwent surgery for their HD in Sheikh Pediatric Tertiary Centre, Mashhad, Iran. The specified time bracket spanned between 1996 and 2011. Basic information was extracted from HIS (Health Information System) and the patients were investigated on both short and long-term GI complications after surgery bases in addition to the concurrence of any associated anomalies.

Results: In a study of 96 (59%) boys and 65 (40.3%) girls, mortality rate was reported to be 15.5% (15 males and 10 females). A considerable majority of almost three forths were detected with both early and late GI complications after surgery. The latter mainly included constipation (33.2%), incontinence (21.3%), enterocolitis (8.8%), diarrhea (13.2%) in a declining order of incidence. Down syndrome and others HD-associated anomalies were detected in 3.7% and 24.3%of cases respectively.

Conclusion: constipation and fecal incontinence were the most prevalent postoperative in our study although were almost within the average range claimed by other studies .Enterocolitis which was reported to be slightly lower than other studies. Also mortality rates were considerably higher, compared to developed nations.

دکتر مسعود جمشیدی، دکتر داوود بادبرین، دکتر هاتف علیزاده

Risk factors ،characteristics and outcomes of complicated necrotizing entrocolitis in Tabriz children's hospital

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Background: Necrotizing entrocolitis has a high morbidities and mortalities. To identify the precursors, characteristics and outcomes of complicated necrotizing enterocolitis we did this survey in our ward.

Methods: We did a retrospective analysis on neonates who had complicated necrotizing entrocolitis (Bell's stage III) from 2009 to 2014.

Results: From 2009 to 2014 ninety and seven neonate with complicated necrotizing entrocolitis underwent surgery and risk factors and co-morbidities were evaluated. Patient divided in three groups based on extension of bowel damage. First group was patients with single perforation and second and third group classified as less and more than 50% of bowel length damage retrospectively. Results and complications of surgery were defined

Conclusion: Conclusion will present at presenting time.

دکتر سعید اصلان آبادی، دکتر داوود بادبرین، دکتر مسعود جمشیدی، دکتر هاتف علیزاده

One-Stage Transanal Endorectal Pull-through Procedure for Hirschsprung's Disease in Neonates

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Background/ Purpose: Traditionally, Hirschsprung's disease (HD) was treated in a staged procedure of colostomy, the definitive procedure then closure of colostomy. Eventually many pediatric surgeons became more interested in the one-stage approach, and results have been favorable when compared with a staged procedure. This study aims at evaluation of management of HD using transanal one-stage endorectal pull-through (TOSEPT) early in the neonatal period.

Materials & Methods: A retrospective review of 127 cases operated in the neonatal period between 2001- 2011 was done. Data collected from records included age, sex, diagnostic procedure, length of aganglionic segment, operative time, blood loss, length of resected segment, and post-operative complications.

Results: Seventy eight males and 49 females were included in the study. The mean operative time was 75 min, mean blood loss was 20 mL, and mean hospital stay was 4 days. Perianal excoriation occurred in 11 cases, enterocolitis in 4 cases, cuff abscess in one cases and anastomotic stricture in 13 cases. Cases completed 4 years follow up showed complete continence in 96 % of cases, while the remaining cases showed good resting sphincter tone and powerful squeeze pressure.

Conclusion: TOSEPT is both feasible and safe in the neonatal period. The mucosectomy, operative time, and intraoperative blood loss are favorable compared to previously publish large series in older children. Likewise, the postoperative complications and the functional outcome are comparable to cases operated in infancy and childhood period.

دکتر عباس بنانی

Management of Common Type Esophageal Atresia with Long Gap by Two Stage Operations

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Background: Many patients with type C esophageal atresia (EA) can be managed safely in one stage operation without (or minimal) tension on the anastomosis as both ends of the esophagus are almost near each other. On the other hand, about 25-30% of the patients with the same anomaly have relatively long gap requiring dissection and mobilization of both proximal and distal esophagus with moderate tension on the anastomosis. However, occasionally, the gap is too long, even after extensive mobilization, to be able to approximate esophageal ends for safe anastomosis. In this situation, two stage operations is recommended.

Methods: During the last 15 years, 4 patients with common type EA and very long gap (more than 2 vertebral bodies) in whom anastomosis was impossible underwent the following procedure: After division of TEF and adequate mobilization of proximal and distal esophagus (without opening the proximal end at this stage to prevent mediastinitis), the two segments are brought together as close as possible and fixed under tension, to pre-vertebral fascia with 2-0 silk or nylon. Closure of distal esophageal end is not necessary but can be done with 2-3 interrupted stitches with 5-0 vicryl. After chest closure, gastrostomy and trans-pyloric jejunostomy tubes are inserted. Re-thoracotomy is performed 3 weeks later for esophageal anastomosis. Post-operatively, the neck is put in full flex position for one week. GE reflux management is started in all patients after discharge and continued for at least one year or more if necessary.

Results: Two patients had uneventful recovery with normal growth and development during follow-up period till 2 years after operation. Esophageal dilatation was done 2 times in both for mild to moderate stenosis during 3-4 months after operation. One patient with severe GE reflux and failure to thrive unresponsive to medical therapy had to undergo funduplication by Touppet procedure. Thereafter, he remarkably improved and had acceptable weight gain. The other patient who had severe GE reflux associated with stenosis at the site of anastomosis 3 weeks after operation was also severely constipated suspicious to Hirschsprung's disease as revealed by contrast enema. Although he partially responded to medical treatment, the parents refused further work-up or management. He aspirated during sleep at night 2 months after operation and died.

Conclusion: In the presence of long gap between proximal and distal esophageal segments in common type EA, adequate dissection and mobilization may bring the 2 ends together for safe anastomosis. However, when the latter is not possible, both ends should be approximated and sutured under tension to the prevertebral fascia as the first stage. Safe anastomosis 3 weeks later at the second stage would be feasible in almost all patients with acceptable results, provided there is no other major associated anomaly.

Perforated Meckel's Diverticulum in a 2day old Neonate; A Case Report

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Background: Perforated Meckel's Diverticulum is a very rare cause of peritonitis in neonates, which can be mimicking other causes of acute abdomen such as necrotizing enterocolitis. The type of ectopic tissue in diverticulum can be affected on its manifestation.

Case Presentation: A 2 day old male neonate, term birth weight 3200 from a 28 year- old mother gravid 1with uncomplicated pregnancy course and normal vaginal delivery with good APGAR score, that transferred from Dehdasht Hospital due to repeated vomiting after breast feeding, which become bilious and proceeded by severe abdominal distention. Physical exam revealed tachycardia, hypotension and severe abdominal distention, while the neonate was lethargic. Abdominal plain radiograph showed Pneumopritoneum. With impression of bowel perforation, the patient underwent exploratory laparotomy, perforated meckel's diverticulum detected, resection and end to end anastomosis was performed. Post operation days were clear. Pathologic report of tissue was inflamed diverticulum with heterotopic gastric mucosa.

Conclusion: Perforated meckel's diverticulum can be occurred in neonates, especially in early days of birth. Because of its low incidence, it can be missed for a few days and progressed with worsen condition and poor prognosis.

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Congenital pouch colon

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Congenital pouch colon (CPC) is a rare form of anorectal malformation (ARM) in which part or the entire colon is replaced by a dilated pouch that usually communicates with a fistula to the genitourinary tract. The severity of this condition may vary from the complete absence of normal colon to the presence of normal colon with manifestation restricted to the rectosigmoid region. Although the highest incidence is in northern and western Indian population, the incidence of CPC is also high in Pakistan and Nepal, with the rest of the world reporting sporadic cases of this malformation. Various classifications have been reported to categorize the rather wide-ranging presentations of this malformation.

The surgical management of pouch colon depends primarily on the condition of the infant at the time of presentation; using a protective placement of a stoma with ligation of the fistula and followed by an abdominoperineal pull-through, still offer the safest option.

In this report, we describe five cases of our patients who diagnosed and managed as different types of CPC.

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Unusual Forms of Congenital Esophageal Anomaly

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Aim: As we know, esophageal atresia has been divided to 6 subgroups, but did not describe variation of TEF associated with esophageal stenosis or duplication in this classic classification. From 1993 until 2013, approximate 300 neonates with esopheal atresia operated in our center but we confronted with 3 neonates with unusual form of congenital esophageal anomaly.

Case 1&2:15 and 19 day old female neonates with choking and cyanosis after first feeding.With suspesion to esophageal atresia, nasal tube inserted but it arrested in midportion of esophagus .Barium swallow were done for both of them and tracheoesophageal fistula were seen. They underwent bronchoscopy and TEF revealed and repaired from neck aproach but feeding tube did not pass from distal prtion of esophagus, so underwent thoracotomy and stenesosis removed and two end of esophagus repaired.

Case 3:23 day old neonate with similar history that NG tube did not pass. She had TEF and duplication of distal portion of esophagus. TEF and duplication repaired with right thoracotomy.

Conclusion: Congenital esophageal anomalies are not limited to classic gross anatomic classification and rarely other additional anatomic subclasses are seen.

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Posterior Urethral Valve in Neonate

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Introduction: Posterior Urethral Valve (PUV) is the most common cause of bladder outlet obstruction in neonate that impairs renal and bladder function. This study was planned in Pediatric Surgery Research Center,Mofid Children's Hospital to evaluate & record the various clinical presentations, management, complications, surgical management, and long term outcome of PUV.

Material/Methods: In a retrospective study 66 neonates whom had been treated for PUV were detectedand evaluated in our hospital from January 2010 to December 2014. Detailed history, paraclinical examinations were performed for each patient and diagnosis was confirmed by Ultrasonography (US) and voiding cystourethrogram (VCUG) in absolute clinical indication. Data entered in SPSS software version 18, and analyzed by descriptive statistical.

Results: Totally 66 neonate with age of one to 30 days were included in this study. Twenty seven cases had been catheterized within one to six days of age, and PUV were ablatedin 46 patients by electric hook, and diversion was performed in 28 cases. The most common symptom in our group was dribbling, and poor stream 51%, followed by urinary infection (UTI) in 40.8%. There was Vesico-Ureteral-reflux (VUR) in 45%, and hydronephrosis in 63%. Most common associated anomaly was kidney anomalies (Multicystic kidney disease, and renal agenesis/dysplasia) in six patients. 14 cases had prenatal history of PUV. Complication occurred in three patients, and mortality happened in four cases. Mean follow-up period was 3.4+-1.2 years (15 months to 5 years).

Conclusion: Urinary drainage by feeding tube in early days of neonatal period, followed by valve ablation is the best treatment in PUV, and urinary diversion improves the outcome. US& VCUG are still the gold standard imaging modality for documenting PUV.

Duodenal De-rotation as a Determinant Step for Proper Management of High Jejunal Atresia

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Background: High jejunal atresia (HJA) near the ligament of Treitz is associated with patulous and atonic jejunum proximal to the atretic segment and also dilatation of the duodenum. The latter phenomenon gives rise to ineffective propulsion. If duodenu-jenunostomy is performed without appropriate tapering or reducing circumference of all parts of the dilated duodenum, majority of patients develop duodenal pseudo-obstruction with patent anastomosis requiring prolong hospitalization or sometimes re-operation .

Methods: Two newborns with HJA underwent the following procedure: After release of local adhesions and division of ligament of Treitz, de-rotation of the duodenum and whole bowel is done. Having resected the patulous dilated jejunum, Thomas tapering of the proximal stoma (at or near the 4th portion of the duodenum) and duodeno-jejunostomy is performed. The dilated duodenum is managed by plication of its antero-lateral wall (roughly 1/3 of its circumference) by interrupted stitches. The procedure is terminated by appendectomy and placing the cecum and right colon at left side of the abdomen (Ladd's procedure (

Results: Both patients had uneventful recovery. They could tolerate gradual increment feeding 5-6 days after operation and discharged home 2-3 days later (on the 7th and 9th post-operative day respectively). Both have been asymptomatic during follow-up period (the first patient 2 years, the second patient 4 months(

Conclusion: De-rotation of the duodenum in HJA makes the whole parts of the dilated duodenum accessible for proper management: reducing its circumference by plication after duodeno-jejunostomy giving rise to more effective duodenal propulsion. Furthermore, owing to lack of extensive resection and absence of long suture line, the procedure without requiring GIA stapler is not only safe and simple but also more practical in the developing countries.

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Protective Temporary Vesicostomy for Upper Urinary Tract Problems in neonate

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Objective: Temporary Vesicostomy is a urinary diversion procedure for patients with upper urinary tract (UUT) dilatation, secondary to bladder outlet obstruction or dysfunction. The aim of this study was to Evaluate our experience in neonate undergoing such diversion, analyzing its efficacy to prevent urinary tract
Infection (UTI), improve or resolve hydronephrosis, stabilize or improve kidney function and restore the Health of UUT.

Methods: In this retrospective study, patients who had Vesicostomy by Blocksom technique due to bladder
Outlet obstruction or dysfunction were evaluated in Mofid Children's Hospital (in Tehran) from March 2007 to
March 2012. The reason for applying this procedure was failure in clinical treatment. Data regarding gender,
Age, diagnosis, time of any surgical intervention, associated anomalies, primary/secondary complications and
Mortality were collected using a questionnaire, and evaluated by giving a grade that ranged from 0 (worst) to
10 (best) based on Licker’s scale.
Findings: From a total number of 53 patients, (88.7% male and 11.3%) female with a mean age of 225 days,
66% had posterior urethral valve and 16 (30%) neurogenic bladder. UTI was present in all cases, Hydronephrosis in 52 (98.1%), and vesico-ureteral reflux only in 45 (84.9%) patients. Valve ablation was Performed in 17 cases, and clean intermittent catheterization in14 patients which were unsuccessful. We Performed Vesicostomy in all patients. Mortality rate was 7.5%. Vesicostomy was closed in 35 patients. Cure
rate was 85% in UTI, 82.7% in hydronephrosis, 80% in VUR, and 86.5% in kidney function.

Conclusion: Vesicostomy is a simple procedure that protects upper urinary tract, decreases hydronephrosis,
and improves kidney function. The procedure is well tolerated and reversible, with less complication and should be considered in children in whom conservative and medical treatment has failed.
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دکتر منصور ملائیان

Surgical Highlights in Successful Tubeless Repair of EA/TEF Experience with 38 cases

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Purpose: A well-founded concern exists among many practitioners over anastomotic leakage in early postoperative period after an EA/TEF repair. Recent studies demonstrate that the undue stress and discomfort, which is associated with chest drain or NG tube, cause restlessness in patients and adversely affect the healing process. A tubeless repair, where no chest drain or NG Tube is used after EA/TEF repair and some management maneuvers, obviates this unnecessary suffering and thus eliminates the risk of leakage.

Material and Methods: The records of 38 infants who underwent EA/TEF repair between 2003 and 2009 were analyzed. Demographics, associated malformations, birth weight and postoperative complications were recorded. The procedure involved posterior extraplural thoracotomy to leave the azygus vein unsevered, division of TEF and end-to-end anastomosis of pouches as Haight's model with 6-0 vycril sutures. We did not use chest drain, NG Tube or feeding tube. All patients underwent primary repair and received TPN postoperatively for 5 days.

Results: During a 6 year study period a total of 38 cases of esophageal atresia with tracheoesophageal fistula including 21 male and 17 female infants were treated. Seven of these patients were diagnosed in the prenatal period by a third trimester ultrasound. Of the 38 cases, 23 (60.5 %) had associated anomalies including cardiovascular (13), ARM (6), GU (5), GI (4) and V (3) .Eighteen patients had a birth weight between 2000-2500 g and the remaining twenty were between 2500-3500 g. In majority of the cases the diagnosis was confirmed at birth by inability to pass an orogastric tube. In most of the cases the gap between two esophageal pouches was about 3-4 cm. Postoperative barium swallows did not reveal any leakage and the early postoperative days of hospitalization were uneventful. The oral feeding began at thefifth postoperative day after the. esophagography confirmed no anastomotic leakage.

Conclusion: There is no need to use any chest drain and or NG tube routinely for protective mechanism after EA/TEF repair. To achieve successful repair in these conditions some technical points and management maneuvers must be considered.

Unusual presentation of cloacalextrophy in a male neonate with incomplete diphallus

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The abdominal wall defects are generally rare congenital anomalies of which cloacalextrophy is the rarest. The defect occurs due to improper closure of venteral abdominal wall. It's exact etiology is unknown. Omphalocele-exstrophy of the bladder-imperforated anus-spinal defects (OEIS) complex or cloacalexstrophy (EC), describes a rare grouping of more commonly occurring component malformations. It is the most severe of the ventral abdominal wall defects with an incidence of 1 in 4,00,000 births.Male:female ratio is 2:1. The exact etiology of this condition is not known. It is sporadic but genetic associations have also been hypothesized It results from defective blastogenesis leading to improper closure of anterior abdominal wall and defective development of cloacae and urogenital septum].In its classic form, cloacal exstrophy refers to exstrophy of the urinary bladder and small or large intestine, anal atresia, hypoplasia of the colon, omphalocele, and anomalous genitalia. We report very unusual variation of this condition with pseudodiphallus.

Case report: A one-day-old male newborn, born by normal vaginal delivery was referred to our hospital for the management of multiple congenital abnormalities. No family history of abnormalities was noted. There was a superiorly placed omphalocoele with an open plate of mucosa inferiorly consisting of two posterior walls of hemibladder on either side with a central strip of intestinal epithelium and classic cloacal extrophy with diastasis pubic and diphallus(each part had one corpus cavenosa and half of corpus spongiosum and one glans) and two separated scrotum on each side with testis in it.

Perineal examination showed imperforate anus. In view of the impending rupture of omphalocele, the child was taken up for surgery. His intestine and bladder were reconstructed.

Discussion: Cloacalexstrophy is a nonlethal, sporadic, nonhereditary malformation. The greatest risk to the infant occurs in the immediate neonatal period owing to dehydration and inability to maintain adequate nutrition. Immediate intervention with aggressive surgical management of the omphalocele, bladder, small bowel, and pubic diastasis enhances the chances for survival. Problems resulting from upper gastrointestinal, genital, and neurologic malformations can be addressed later in infancy. A classical presentation of cloacalextrophy consists of an omphalocoele superiorly with an open plate of mucosa inferiorly consisting of two posterior walls of hemibladder on either side with a central strip of intestinal epithelium. In the central plate, sometimes the small bowel may prolapse producing the so-called elephant trunk deformity. Sometimes the appendiceal orifices may be duplicated and present in the central strip. In our cases there was a superiorly placed omphalocoelewith an open plate of mucosa inferiorly consisting of two posterior walls of hemibladder on either side with a central strip of intestinal epithelium. Male genitalia usually represented as bifid penis on a widely separated pubic bone.The penilemorphology in the case studies described previouslyconsisted of partially or fully fused corpora or a solitary corporal body covered completely by urothelium. Our baby had duplicated phallus, each part has one corpus cavenosa and, half of corpus spongiosum and, one glans and, two separated scrotum on each side with testis in it. In 35–65% of the cases, cloacalextrophy is associated with the other three classical malformations (omphalocele, imperfo-rate anus, and spine abnormalities). It has a variable association with pelvic and genital abnormalities, limb abnormalities, and spina bifida, which has been described as lumbar in 72%of the cases, sacral in 14%, and thoracic in 14%.

Cloacalextrophy is a rare congenital malformation of unknown etiology with poor prognosis, but immediate intervention with aggressive surgical management can enhance the chance of survival.

دکتر مریم قوامی عادل، دکتر رحمان خسروی

Epididymo - orchitis: A rare condition in neonates

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Background: Epididymo-orchitis and scrotal abscess are uncommon causes of acute scrotum in neonatal age group. There is usually a predisposing factor such as urinary tract anomalies and infection or sepsis. However the main issue is to differentiate it from testicular torsion rapidly to save the affected testis. Here we report orchitis in 3 neonates without any predisposing factor for the first time.

Method: Between "April 2005 to November 2014" medical sheets of neonates with acute scrotum from 2 centers were reviewed retrospectively. We just studied the epididymo-orchitis group.

Results: There were 5 patients, including 4 with epididymo-orchitis and one with testicular torsion. As there was no definite diagnosis according to Doppler ultrasonography findings all patients had a scrotal explore. Urine and blood cultures were negative in all. There was no positive finding in urinary tract ultrasonography either. All had an uneventful recovery after surgical drainage and proper antimicrobial management.

Conclusion: Epididymo-orchitis is a rare condition in neonates. Early diagnosis and evaluating for urinary tract infection or sepsis are recommended however it may occur without any predisposing factor.

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Evaluation of early and late complications of hernia surgery in people under14 years admitted to Shohada Hospital in Khorramabad from 2004 to 2013

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Background: inguinal hernia is a common surgical procedure. The prevalence of this disease in full term infants 5.3% and in preterms up to 30% has been reported. It is usually easy to diagnose and often repair is not complicated.

Methods: A total of 186 people during a period of 10 years with sequential sampling were enrolled into study. All patients were operated with a same surgeon by open surgery method. After reviewing the files, information entered into the check list and then the data were analyzed by SPSS version 19. In the significance level of $P<0.05$ the statistical analyzes were performed by consultant statistics.

Results: Of these, 155 patients (83.3%) were male and 31 (16.7%) were female. The most frequent age group for a year (2/21%) was observed. One year age groups (21.2%) were seen more frequent. Postoperative complications: infection (4.3%), recurrence (4.3%), seroma and hematoma (0.5%), bladder injury (2.7%), hydrocele (3.2%) percent were accounted for.

Conclusion: In this study, the infection rate is about 4.3% that looks to factors such as the intraoperatively sterilization by the surgeon and patient cooperation on surgical site dressing can be a cause of it. However, postoperative complications were seen in a small percentage of patients. Early diagnosis of the disease and the onset of therapeutic intervention soon as possible and skill of the surgeon -according to high patient satisfaction of surgery- have been involved.

Perioperative care of newborn who need surgical procedure

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All newborn with surgical problems in all children hospital succeed in treating is based upon the multidisciplinary team approach that can only be found. A full preoperative assessment with a detailed history from both the parents and the notes is essential. Gestational age at birth, weight, general physical condition. Apnea if detected, frequency, duration and if with bradycardia as soon as possible pediatric Anesthesiologist visit the patient for intubation and oxygenation and monitoring respiratory system and ventilator support, and also pediatric cardiologist for examination the heart and Echocardiogram as needed.
Surgical neonates have the potential to develop postoperative apneas and poor temperature regulation, Therefore it is imperative apnea that they are cared for in areas where there are both appropriate facilities and trained staff to monitor their condition and intervene when necessary.

Apnea Monitoring: Central apneas can be defined as the cessation of breathing activity that lasts longer than 15 – 20 seconds, or shorter if it is associated with bradycardia, cyanosis or pallor.

Temperature control: Newborns have numerous ways to lose heat and unlike adults have less efficacious systems to generating heat. Systemic effects of hypothermia in the neonate: Increased oxygen consumption, impaired respiratory responses, decreased drug metabolism, Decreased immune function, reduced ability of wound repair

Anti microbial prophylaxis, Postoperative fluid and electrolyte and nutrition must be considered in perioperative care of new born who need surgical procedure.

دکتر عباس بنانی

Complete Diverting Loop Colostomy: Introduction of a New Technique

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Background: Compared to double barrel colostomy, loop colostomy is a relatively fast and easy procedure to perform and easy to close. However, even if properly constructed, complete diversion is unusual, as spill-over may start soon after operation. This is especially true in the presence of loose stool or retraction. Although a variety of modifications have been explained to prevent distal limb contamination, but most of them have not truly been completely diverting.

Methods: The following procedure has been performed in five patients requiring fecal diversion. After loop colostomy (sigmoid or transverse colon), its anterior wall on the distal limb is opened transversely (half-way between the distal skin wound and dome of the colostomy). Having washed out the distal limb through a French catheter, the anterior opening is extended to the lateral sides of the colostomy. The whole length of the posterior wall is dissected submucosally for 4-5 mm in width and incised. The seromuscular layer of posterior wall remains intact to prevent retraction or inadvertent bleeding. The distal limb is closed by a 5-0 running absorbable suture or prolene, taking full thickness bite of the anterior wall to the mucosal and submucosal layer posteriorly. The closed distal limb is covered and supported by inner part of proximal colostomy which is advanced and sutured to edge of the distal skin wound.

Results: The procedure was done for the following reasons: Sigmoid colostomy in two females (2 and 3 week-old) with intermediate type imperforate anus and recto-vestibular fistula. Sigmoid and right transverse colostomy in two males (1 and 3 month-old) for Hirschsprung's disease. Sigmoid colostomy in one boy (5 year-old) for deep perineal laceration due to trauma. Failure (re-opening of distal limb) occurred in one patient who had imperforate anus while 4 others had successful complete fecal diversion as revealed by gross inspection and also absence of defecation up to the time of closure of colostomy 2-4 months later.

Conclusion: In order to have a complete diversion after loop colostomy without spill-over of feces, a simple technique is introduced in which the distal limb is closed and covered by the proximal limb. Nonetheless, this procedure is not applicable in situations where there is complete or near complete distal anatomical obstruction, such as high or intermediate types of imperforate anus in males or without rectovaginal fistula in females.

Is Sacroccygeal Teratoma always Neonatal Surgery? (a case report)

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Background: Sacrococcygeal Teratoma (SCT) is the most common tumor in the newborn. This is a rare tumor that diagnosed in utero in the second trimester and sometimes needs prenatal approach for fetal intervention for resection or debulking of the tumor. Malignancy is uncommon at birth, but increases with age and with incomplete resection. In some reports malignancy rate in patients older than 1 year were 75% with usual SCT. Complete excision of the tumor should be carried out as soon as the neonate is stable enough to undergo the operation. Serum markers should be determined before the operation for later comparison.

Case Presentation: A 18-month-old female had been admitted in clinic with sacrococcygeal teratoma in spite of diagnosis at birth. First sonography reported a hypereco and hetrogen mass measuring 18*15 mm in posterior of rectum suspicious to lypomyelomenangocle. She had not urinary and bowel symptoms. She was visited several times by pediatrician, neurosurgeon and pediatric surgeons in Qazvin and Tehran, but without any conclusion to operation.

CT scan, MRI, Sonography, blood analysis were done

Conclusion: At 16th months of life surgery was done on prone position with en-bloc excision including the coccyx. Pathology report was cystic mature teratoma without malignancy.

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Evaluation of Sacrococcygeal teratoma in neonatal period in Mofid Children's Hospital

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Background: Sacrococcygeal teratoma (SCT) is uncommon (1:35,000-1:40,000 newborns). However SCT is the most common germ cell tumor (GCT) of infancy and early childhood. We report a 7-year single-center experience with a focus on late effects.

Methods: Cases were identified from the files in years between 2006 until 2014. Perinatal data, associated anomalies, operative findings, histology, and survival were recorded. Continence was assessed clinically.

Results: 9 patients (6 females) were treated for SCT. 2 of 9 were diagnosed antenatally. Seven children presented in neonatal period. There was no significant associated anomalies .Surgery comprised complete tumor excision with coccygectomy. Histology was mature teratoma in 8 of them, immature in single patient. Overall survival was 100%. They were Altman type II 66% and type III 34%. Wound infection was seen in 77% and partially wound dehiscence in 33%.one case had rectal fistula that underwent colostomy .urinary retention was seen in one cases. One child had recurrence of SCT at 16 months after primary surgery. Recurrences showed a histological immaturity, compared with the primary tumor pathology.

Conclusions: Follow-up by oncologists, surgeons remains an important part of SCT management. Regular follow-up after surgery is mandatory to find tumor relapse earlier and to improve the outcome. Urodynamics and anorectal manometry should perform as indicated. Neuropathic bladder or bowel disturbance will identify on long-term follow-up.

Oral Dextrose with Pacifier for pain relief during venipuncture in infants

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Background: venipuncture for infants is a painful procedure. Pharmacological and non-pharmacological interventions have been proposed to reduce pain during venipuncture. In our study, we evaluated the analgesic effect of 20% Dextrose with pacifier using a validated pain scale during the first venipuncture in infants.

Methods: A masked, randomized clinical trial for one dose of 2 ml of oral 20% Dextrose solution followed by sucking a pacifier 2 minutes before the first venipuncture in infants was conducted in 2014. The results were compared to those of a control group that did not receive oral Dextrose solution. Pain was evaluated using a Neonatal Infant Pain Scale immediately before and immediately after the venipuncture in both groups.

Results: Eighteenth patients who were injected for the first time in infants were included. Fourteen were included in the intervention group and 40 in the control group. The number of patients with pain immediately before the procedure was similar in both groups. The number of patients with pain after venipuncture was 14.7% in the intervention group and 69.5% in the control group (p,0.001).

Conclusion: Two ml of oral 20% Dextrose solution with pacifier given 2 minutes before a venipuncture in infants was an effective measure for pain relief.

Fetus-in-fetus: Our cases report and review of the literature

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Fetus in fetus is a rare condition usually present-ing as an encapsulated pedunculated vertebrate fetiform mass in a newborn infant.

Our cases :A 23 – years old, white woman presented at her 20 – week gestation for evaluation of a fetal fetal growth and development by sonography. There were two fetuses; one of them was male and the other one female. The amniotic fluid volume was normal, fetal limb and cardiac activities were normal too. The examination of both fetuses anatomy was entirely normal with exception of a lower abdominal mass. At the 39th week, both babies were born (the male 2600gr and the female 3000gr). After 43 days a large mobile abdominal mass was detected. The radiological reports suggested a teratoma or neuroblastoma. Despite the report, we thought it might be a fetus in fetus since we observed a bone like femor, which was verified by our laparatomy. It is essential to mention that it was the first pregnancy of mother and she had not used any medication during the pregnancy. The baby was followed for 9 months and no complication was observed and pathological report is as follows

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Limb sparing surgeries for a huge congenital lower limb lymphatic malformation (a case report)

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Background: Klippel–Trenaunay syndrome (K–T syndrome) is one of several rare syndromes related to the congenital disease nevus flammeus (“port-wine stain”), the other disorders include Sturge–Weber syndrome, Parkes–Weber syndrome, hyperkeratotic cutaneous capillary-venous malformation, and Proteus syndrome. This syndrome (KTS) has many known clinical features and is usually associated with: bony hypertrophy of a single extremity, varicose veins and certain vascular anomalies, involving mostly venous and lymphatic malformations. In general, K–T syndrome affects a single extremity, and the inferior extremity is the most common site.

Careful clinical and radiologic measuring of the affected limb should be done at regular intervals to assess leg length discrepancy and to formulate an approach like as compression, Epiphysiodesis, and leg shortening procedures to prevention and treatment of the overgrowth. Amputation or debulking and remodeling of limb is sometimes necessary to allow for better function and cosmesis.

Case presentation: Our patient was a neonate who was diagnosed as a hypertrophic anomaly of left lower limb prenatally trough ultrasonography and MRI. The diagnosis was confirmed as Klippel–Trenaunay syndrome after birth and he was considered for limb amputation first but the plan changed into serial debulking and limb salvage then.

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A report of neonatal hyper parathyroidism

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A newborn 4 days of age was admitted with poor feeding and lethargy.The result of primitive laboratory tests was:

WBC=9900. Na=139. P=4 -1.6. Ca=9.1 - 15 - 18. Hb=8.9 PTH =high

Bilateral Nephrocalcinosis were identified by abdominal sonography <.Sestambi Scan did not show any hyperplasia or Adenoma.

after premitive resuscitation treatment with Lasix ,Calcitonin ,Pamidronate was started. and neonate with primary hyperparathyroidism diagnosis candidate for operation.

Total parathyroidectomy (all four parathyroid glands) were removed. Less than 1/4 of a one parathyroid was implanted in left SCM muscle.

Calcium returned to normal range. patient was discharged with good condition

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Neonatal hyperparathyroidism – A case report

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Background: Neonatal hyperparathyroidism is a very rare and frequently fatal disorder, which usually develops within the first 3 months of life.1, 2 The early signs are severe hypercalcaemia, lethargy, hypotonia, respiratory distress, failure to thrive, and polyuria. Some late-presenting patients have mental retardation.3 It is a kind of primary hyperparathyroidism, and usually there is hyperplasia of all parathyroid glands.3,4 A familial link to this disease is found in about half of the patients. Early diagnosis and treatment are mandatory to provide normal growth of the baby. The urgent surgical treatment includes: bilateral neck exploration, total parathyroidectomy with or without autotransplantation, and transecervical thymectomy. Subtotal parathyroidectomy is associated with high rate of recurrence, and is not recommended.

Case presentation: We present a neonate with a severe hypercalcaemia (Ca= 37.4 mg/dL), and hyperparathyroidism, who was successfully treated by total parathyroidectomy and transcervical thymectomy. The patients became symptom free and did not require any additional medical treatment during 3 years fallow up.

دکتر عباس هادیپور، دکتر سهیل اوصیا

Evisceration of abdominal viscera from lumbar area, rare complication of birth injury

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Introduction: The overall incidence of birth injuries are about 2% in vaginal delivery and 1.1% in cesarean delivery.

Some factors increase the risk of birth injuries, such as macrosomia- maternal obesity- use of instruments in vaginal delivery such as forceps, vacuum and some condition (oligohydraminous).

The most common injuries are soft tissue problems. Laceration- ecchymosis that are mild with no specific treatment.

Extracranial and intracranial injuries for examples cephalhematoma- subdural hematoma or intraventricular hemorrhage are another injuries.

Fractures and dislocation and neurological injuries such as nerve pulsy is not uncommon.

But intraabdominal trauma around delivery is rare such as sub capsular hemorrhage in liver-spleen or adrenal glands.

Now we present a very rare case of birth injury.

A 26 weeks gestational age male referred by a neonatologist with Evisceration of intestine from left lumbar area after cesarean section for premature rupture of membrane.

After preoperative prepration in NICU patients candidate for early repair of abdominal wall.

At surgery the edge of wound was sharp with no active bleeding. No gross anomaly was seen.

Abdominal wall repaired, but patient died for prematurity and RDS.

Conclusion: Birth injury maybe fatal especially in high risk neonate with prematurity.

دکتر مریم قوامی عادل، دکتر وفا صباغ

Epignathus case report and review of articles

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Teratomas are neoplasms composed of multiple tissues from all 3 germinal layers: ectoderm, mesoderm, and endoderm.

They occur in about 1:4,000 births, with a female predominance, most commonly in the sacrococcygeal region.

Oral teratomas are extremely rare and seen almost exclusively in infants, usually in neonates; these tumors occur in approximately

1:35,000 to 1:200,000 of live births, comprising 2% to 9% of all teratomas.

Epignathus, is tridermal in origin but can differentiate into recognizable organs and usually are diagnosed at birth.

These tumors frequently accompany other anomalies such as cleft palate, bifid tongue, and double tongue. A giant epignathus can led to death in the neonatal period because of respiratory obstruction.

The newborn should undergo surgery within the first days of life. Complete surgical excision is the treatment of choice and its recurrence is usually rare. Here we explain our case and have literature review.

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Comparative study of high powerful magnet with conventional repair of suture in the intestinal anastomosis of rats

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Background: In this study, given the importance of gastrointestinal anastomosisin surgical procedures, attempts have been made to compare the results of employing Magnetic coils compressive and conventionalsuture inintestinal anastomosis of rats

Methods: This study was an experimental trialon 60 rats of the same sex, race and weight, which had been randomly divided into two experimental and control groups. First, the rat intestine was cut off from a relatively fixed point and then magnet anastomosis was performed at the both ends of bowel in the experimental group and manual suture in the control group. Anastomosis was then examined 10 days after the surgery for possible complications such as leakage, adhesion, stenosis and occlusion with a histological analysis of tissue repair

Results: The mean time required for performing anastomosis of the rat intestine was 735 and 366 seconds for the control and experimental groups respectively. The average rate of anastomotic burst pressure was 143.33 mm Hg and 147.53 mm Hg for the control and the experimental groups respectively.

Also, there operation performed 10 days after the first operation did not show any significant difference between two groups in surgical complications and factors such as infiltration factor of inflammatory cell and fibroblast activity. The microscopic examination indicated that the tissue reaction in the anastomosis site was better in terms of tissue repair of neo-angiogenesis intestine and collagen deposition in the magnet group.

Conclusion: Given the shorter duration of the anastomosis by magnets and more favorable histological results reported in the above group, as well as the lack of any significant difference in complications of the two techniques, magnetic compressive anastomosis (Magnamosis) can be used as a new technique for intestinal anastomosis.

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Comparison of result of intestinal suture and fibrin glue in mice

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Background: In many surgical procedures in pelvic and abdomen, gastrointestinal anastomosis plays a main role. Prolonged time of intestinal anastomosis is such a problem that we face in the usual way of handsewn. This issue will be important when the patient's general condition remains poor and surgery should be resolved faster or a large number of anastomoses are required or anastomosis is difficultly performed such as thoracoscopy and laparoscopy surgery. In such cases, using a fast, safe and reliable method which is also associated with minimal tissue damage and complications aids significantly the patients and surgeons. Due to the multiple usages of fibrin glue in the different fields of medical science. In this study, we have decided to compare the results of using fibrin glue with suture in intestinal anastomosis traditionally in animal models.

Methods: This study is an experimental trial that has been done by choosing 60 mice in same gender, race and weight and by dividing them randomly into two groups of case and control and placing them under the same care and nutritional conditions. Initially intestine of mice was completely disconnected from a relatively fixed point and then the intestinal anastomosis with fibrin glue in case group and handsewn anastomosis was performed in the control group. Ten days after operation, the situation of anastomosis was studied in terms of possible complications of surgery including leak, adhesions, stenosis and obstruction in the surgical site. Then the anastomosis site with 1cm from the margin were resected to investigate tissue healing parameters and samples were evaluated histologically

Results: The mean time to perform the mice intestinal anastomosis was 12:25 min in the control group and about 6:08 min in the case group. Mortality incidence in two groups showed no significant difference. Also in the performed laparotomy 10 days after the first operation, there was no significant difference in complications between two groups. In the microscopic examination, the created tissue response in the anastomotic site in terms of intestinal tissue healing, the method of using fibrin glue in comparison to the suture technique, was significantly more favorable.

Conclusion: Regarding to shorter duration of fibrin glue anastomosis technique and more favorable histological results in case group and also no difference in complications between the two methods, this biological glue can be used as a new method in intestinal surgeries and their anastomoses.

Encounter with Meconium Peritonitis

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Meconium Peritonitis is define as an aseptic, chemical, or foreign body peritonitis caused by a spill of meconium in the abdominal cavity related to the prenatal perforation on the intestine.
Perforation is usually caused by obstruction from meconium ileus, intestinal atresia, stenosis, volvulus, internal hernia, congenital peritoneal bands, intussusceptions less commonly, no evidence of distal obstruction exist. In these cases, the perforation may be a Meckel's diverticulum, an appendix, or simply an idiopathic finding. Three pathologic types of meconium peritonitis have been describe: fibroadhesive, cystic, and generalized. Fibroadhesive meconium peritonitis is the most common type. The sterile meconium initiates an intense chemical peritonitis induced by the digestive enzymes contained in the meconium. This effect results in dense fibrous adhesions and agglutination of the intestine. The site of perforation is frequently not found, because it has been effectively sealed off by the fibrous and calcific adhesions thet are the cause of the obstruction.
We had nine new borns with meconium peritonitis since two years ago. One due to volvulus and eight of them we could not find any cause. All of them were relieved after surgery.

Cranial remolding orthosis in the treatment of infants with positional plagiocephaly

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Background: Deformational Plagiocephaly is a multi-planar deformity of the cranium occurring either pre-or post-natally in infants. Posterior plagiocephaly has increased in the last decade. These increases in plagiocephaly follow a shift in two cultural practices that occurred in the early 1990s. The first is the change from prone to supine sleeping after pediatricians recommended this position as a way to reduce Sudden Infant Death Syndrome. This highly successful ‘‘Back to Sleep’’ program was coincidentally timed with the second change in childcare practices by parents: the use of baby swings, ‘‘bouncy’’ seats, and convenient and interchangeable child carriers and car seats. These seating systems have become a common method of positioning and carrying babies during daytime hours, reducing the amount of time spent in prone and other positions that offer an alternative to supine positioning. Constant posterior contact against the back of the head during the day and night perpetuates asymmetry present at birth and in many cases exacerbates it. In addition, the increase in multiple births, a common, cause of DP and the rise in the number of children diagnosed with torticollis have also contributed to the increase of DP. The growing number of infants with DP has raised clinical questions about which children should be treated for DP, and how to successfully intervene.

Methods: A systematic review was conducted to investigate evidence that cranial orthosis is effective in the treatment of DP.

Results: This review demonstrated that sever deformity is likely to be corrected more quickly and effectively with cranial orthosis (when used during the appropriate period of infancy) than with repositioning and physical therapy.

Conclusion: The remolding orthosis is a convincing option which can be recommended in infants with posterior positional plagiocephaly whose skull deformity is not satisfactory corrected by physiotherapy. It should always be used before surgery is considered for infants with recognized positional plagiocephaly in the first year of life.